SPECIFICATIONS

Model	33680144
No load speed (RPM)	11000
Net weight (kg)	1.72
Spindle thread	5/8" x 11
Input currency	5A
Rated voltage (V)	120

- Manufacturer reserves the right to change specifications without notice;
- Specifications may differ from country to country.

GENERAL SAFETY RULE

Save These Instructions

WARNING! Read and understand all instructions. Failure to follow all instruction listed below, may result in electric shock, fire and/or serious personal injury.

WORK AREA

- Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. A spark created by a power tool may ignite the dust or fumes.
- Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

ELECTRICAL SAFETY

- Double insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.
- Avoid body contact will grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.

- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
- When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

PERSONAL SAFETY

- Stay alert. Watch what you are doing and use common sense when operating a power tool. Do not use the tool while tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- Avoid accidental starting. Be sure the switch is off before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
- Remove adjusting keys or wrenches before turning the tool on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
- Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection may be used for appropriate conditions. Ordinary eye or sunglasses are NOT eye protection.

TOOL USE AND CARE

- Use clamps or other practical ways to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- Do not force the tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.

- Do not use the tool if the switch does not turn it on or off. Any tool that can not be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
- Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.
- Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- Use only accessories that are recommended by the manufacturer for your mode. Accessories that may be suitable for one tool, may become hazardous when used on another tools.

SERVICE

- Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in risk of injury.
- When servicing a tool, use only identical replacement parts. Follow instructions in the MAINTENANCE section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate amp rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

SPECIFIC SAFETY RULES

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to grinder safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

- Always use proper guard with grinding wheel. A guard protects the operator from broken wheel fragments.
- Accessories must be rated for at least the speed recommended on the tool warning label. Wheels and other accessories running over rated speed can fly apart and cause injury.
- Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- When using depressed center grinding wheels, be sure to use only fiberglass-reinforced wheels.
- Always use safety glasses or goggles. Ordinary eye or sunglasses are NOT safety glasses.
- Check the wheel carefully for cracks or damage before operation. Replace cracked or damaged wheel immediately. Run the tool (with guard) at no load for about a minute, holding tool away from others. If the wheel is flawed, it will likely separate during this test.
- Use only flanges specified for this tool.
- Be careful not to damage the spindle, the flange (especially the installing surface) or the lock nut. Damage to these parts could result in wheel breakage.
- NEVER use tool with weed cutting blades or other sawblades. Such blades when used on a grinder frequently kick and cause loss of control leading to personal injury.
- Hold the tool firmly.
- Keep hands away from rotating parts.
- Make sure the cord is clear of wheel. Do not wrap cord around your arm or wrist. If control of tool is lost, cord may become wrapped around you and cause personal injury.
- Make sure the wheel is not in contact with the workpiece before the switch is turned on.
- Before using the tool on an actual workpiece, let it run for a while. Watch for vibration or wobbling that could indicate poor installation or a poorly balanced wheel.

- Use the specified surface of the wheel to perform the grinding.
- Watch out for flying sparks. Hold the tool so that sparks fly away from you and other persons or flammable materials.
- Do not leave the tool running. Operate the tool only when hand-held.
- Do not touch the work/piece immediately after operation; it may be extremely hot and could burn your skin.
- ALWAYS wear proper apparel including long sleeve shirts, leather gloves and shop aprons to protect skin from contact with hot grindings.
- Use of this tool to grind or sand some products, paints and wood could expose user to dust containing hazardous substances. Use appropriate respiratory protection.

WARNING: MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

SYMBOLS

The followings show the symbols used for tool.

V	---- volts	/n	---- no load speed
A	---- amperes	⊠	---- Class II Construction
Hz	---- hertz	/min	---- revolutions or
~	---- alternating current		reciprocation per minute

FUNCTIONAL DESCRIPTION

CAUTION: Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

Shaft lock

CAUTION:

Never actuate the shaft lock when the spindle is moving. The tool may be damaged.

Press the shaft lock to prevent spindle rotation when installing or removing accessories.

Switch action

CAUTION:

1. Before plugging in the tool, always check to

see that the slide switch actuates properly and returns to the "OFF" position when the rear of the slide switch is depressed.

2. Switch can be locked in "ON" position for ease of operator comfort during extended use. Apply caution when locking tool in "ON" position and maintain firm grasp on tool.

To start the tool, slide the slide switch toward the "I (ON)" position. For continuous operation, press the front of the slide switch to lock it.

To stop the tool, press the rear of the slide switch, then slide it toward the "O (OFF)" position.

ASSEMBLY

CAUTION:

Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.

Installing side grip (handle)

CAUTION:

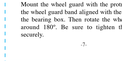
Always be sure that the side grip is installed securely before operation.

Screw the side grip securely on the position of the tool as shown in the figure.

Installing or removing wheel guard

CAUTION:

When using a depressed center grinding wheel/multi-disc, flex wheel, wire wheel brush or cut-off wheel, the wheel guard must be fitted on the tool so that the closed side of the guard always points toward the operator.



Mount the wheel guard with the protrusion on the wheel guard band aligned with the notch on the bearing box. Then rotate the wheel guard around 180°. Be sure to tighten the screw securely.

To remove wheel guard, follow the installation procedure in reverse.

Installing or removing depressed center grinding wheel/multi-disc

WARNING: Always use supplied guard when depressed center grinding wheel/Multi-disc is on tool. Wheel can shatter during use and the guard helps to reduce chances of personal injury.

Mount the inner flange onto the spindle. Fit the wheel/disc on the inner flange and screw the lock nut onto the spindle.

To tighten the lock nut, press the shaft lock firmly so that the spindle cannot revolve, then use the lock nut wrench and securely tighten clockwise.

To remove the wheel, follow the installation procedure in reverse.

Installing or removing flex wheel (optional accessory)

WARNING: Always use supplied guard when flex wheel is on tool. Wheel can shatter during use and guard helps to reduce chances of personal injury.

Follow instructions for depressed center grinding wheel/Multi-disc but also use plastic pad over wheel. See order of assembly on accessories page in this manual.

Installing or removing abrasive disc (optional accessory)

NOTE: Use sander accessories specified in this manual. These must be purchased separately.

Mount the rubber pad onto the spindle. Fit the disc on the rubber pad and screw the lock nut onto the spindle. To tighten the lock nut, press the shaft lock firmly so that the spindle cannot revolve, then use the lock nut wrench and securely tighten clockwise.

To remove the disc, follow the installation procedure in reverse.

ALWAYS hold the tool firmly with one hand on housing and the other on the side handle. Turn the tool on and then apply the wheel or disc to the workpiece.

In general, keep the edge of the wheel or disc at an angle of about 15° to the workpiece surface.

During the break-in period with a new wheel, do not work the grinder in the B direction or it will cut into the workpiece. Once the edge of the wheel has been rounded off by use, the wheel may be worked in both A and B direction.

Operation with wire cup brush (optional accessory)

CAUTION:

- Check operation of brush by running tool with no load, insuring that no one is in front of or in line with brush.
- Do not use a brush that is damaged, or which is out of balance. Use of a damaged brush could increase potential for injury from contact with broken brush wires.
- ALWAYS use guard with wire wheel brushes, assuring diameter of wheel fits inside guard. Wheel can shatter during use and guard helps to reduce chances of personal injury.

Unplug tool and place it upside down allowing easy access to spindle. Remove any accessories on spindle. Thread wire wheel brush onto the spindle and tighten with the wrenches. When using a wire wheel brush, avoid applying too much pressure which causes over bending of wires, leading to premature breakage.

Operation with abrasive cut-off wheel (optional accessory)

WARNING: When using an abrasive cut-off wheel, be sure to use only the special wheel guard designed for use with cut-off wheels.

NEVER use cut-off wheel for side grinding.

During cutting operations, never change the angle of the wheel. Placing side pressure on the cut-off wheel (as in grinding) will cause the wheel to crack and break, causing serious personal injury.

MAINTENANCE

CAUTION: Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

The tool and its air vents have to be kept clean. Regularly clean the tool's air vents or when-ever the vents start to become obstructed.

Replacing carbon brushes

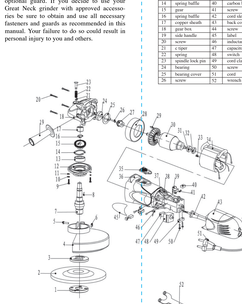
Remove and check the carbon brushes regularly. Replace them when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.

CAUTION:

- These accessories or attachments are recommended for use with your Great Neck tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

- Your tool is supplied with a guard for use with a depressed center grinding wheel, multi-disc, flex wheel and wire wheel brush. A cut-off wheel can also be used with an optional guard. If you decide to use your Great Neck grinder with approved accessories be sure to obtain and use all necessary fasteners and guards as recommended in this manual. Your failure to do so could result in personal injury to you and others.

ANGLE GRINDER EXPLOSION DRAWING



No	Part name	No	Part name
1	flange	27	pinion
2	grinding wheel	28	wind shield ring
3	flange	29	woodruff key
4	guard	30	rotor
5	screw	31	housing
6	bolt	32	bearing sheath
7	output spindle	33	screw
8	woodruff key	34	stator
9	screw	35	pushing hinge of switch
10	spring washer	36	housing
11	flat washer	37	hand spike of crotch
12	gear box cover	38	spring
13	bearing	39	brush holder
14	spring baffle	40	carbon brush
15	gear	41	screw
16	spring baffle	42	cord sleeve
17	copper sheath	43	back cover
18	side handle	44	screw
19	side handle	45	label
20	screw	46	inductance
21	c taper	47	capacitor
22	spring	48	switch
23	spindle lock pin	49	cord clamping
24	bearing	50	screw
25	bearing cover	51	cord
26	screw	52	wrench

CAUTION: ALWAYS WEARSAFETY GOGGLES

GREATNECK TOOLS LLC
GREAT NECK, NY 11021
MADE IN CHINA

www.greatnecktools.com

ONE YEAR LIMITED WARRANTY

For one year from the date of purchase of this GreatNeck® product you find any defect in material or workmanship, through normal usage, either return it to the place of purchase, or send it to GreatNeck® Tools LLC. for repair or replacement at our discretion. In order to obtain this service send your tool and proof of purchase, transportation pre-paid, to GreatNeck® Tools LLC Q.A. Dept. 1500 E. Raines Rd. #3, Memphis, TN 38118. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Please see our website for full warranty information.

Item# 80144

GreatNeck

ANGLE GRINDER 4-1/2"

Assembly and Operating Instructions

Certificate Number: E214651